

ABSTRACT

A method for systematically calculating a weighted sum without the need for maintaining the value of each individual term by first providing a weighted sum equation that can be represented in recursive form; second, rewriting the weighted sum equation as a recursive equation; and third, applying the recursive equation to progressively update the weighted sum. The method may also include a method for tracking a user's activities in a web site and decreasing user activity counts that represent a user's previous activities. This method comprises the following steps. The first step is storing a previous user activity count in a database configured to track the user's activities in the web site. The next step is receiving a current user activity count derived from the user's current activities in the web site. Then a weighted reduction is applied to the previous user activity count to form a weighted activity count. Another step is combining the weighted activity count with the current user activity count to form an updated user activity count. A final step is replacing the previous user activity count in the database with the updated user activity count.